

PEARSON, J.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

IN RE: EAST PALESTINE TRAIN)	
DERAILMENT)	CASE NO. 4:23CV0242
)	
)	JUDGE BENITA Y. PEARSON
)	
)	<u>MEMORANDUM OF OPINION</u>
)	<u>AND ORDER</u>
)	[Resolving ECF Nos. 617 and 620]

Pending is Third-Party Defendant OxyVinyls’ (“OxyVinyls”) Motion to Exclude Certain Opinions of R. Peter McClellan ([ECF No. 617](#)). Also pending is Third-Party Defendants GATX Corporation and General American Marks Company’s (“GATX”) Motion to Exclude in Part the Expert Testimony of Peter McClellan and Joinder to OxyVinyls’ Motion to Exclude Certain Opinions of R. Peter McClellan ([ECF No. 620](#)). McClellan is proffered by Third-Party Plaintiffs Norfolk Southern Corporation and Norfolk Southern Railway Company (“Norfolk Southern”). The Court has been advised, having reviewed the record, the parties’ briefs, and the applicable law. For the reasons that follow, the motions are denied.

I.

GPLX 75465 (Car 23) is a railcar owned by GATX.¹ The failure of a roller bearing on the L1 wheel of GPLX 75465 caused the derailment of Train 32N on February 3, 2023. The

¹ See Stipulation Regarding Uncontested Facts ([ECF No. 586](#)) at PageID #: 17627, ¶¶ 3-4; *see also* Stipulation ([ECF No. 740](#)). The Court uses the Car Numbers for the railcars agreed to by the parties in [ECF No. 740](#) in resolving the within motions.

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derailment caused pool fires that impinged five derailed tank cars containing vinyl chloride monomer (“VCM”).² OxyVinyls was the shipper of the VCM.

Three days after the derailment, Norfolk Southern performed a vent and burn on the five tank cars containing VCM, and it now claims that it did so, in part, because the cars were undergoing polymerization, and melted aluminum tank car components caused the pressure relief devices (“PRDs”) on those cars to malfunction. The PRDs are designed to open when the pressure inside the tank cars reaches a certain level.

GATX also owned GATX 95098 (Car 29).³ GATX 95098’s pressure plate assembly was fitted with a protective housing cover and angle valve handwheels made from aluminum, which has a lower melting point than steel. *See* Opening Expert Report of R. Peter McClellan, P.E., CFEI, LEED AP ([ECF No. 617-1](#)) at PageID #: 27336-37, ¶ B.1.4; PageID #: 27402, ¶ D.0.2. As temperature and internal pressure in those cars increased, Car 29’s PRD activated until abruptly stopping on February 4, 2023. Subsequent inspection of the PRD on GATX 95098 revealed that the angle valve handwheels and protective housing cover were missing, the angle valves were covered in solidified molten aluminum, and there was a pool of solidified molten aluminum and loose metallic debris in the pressure plate’s protective housing.⁴ *See* [ECF No. 617-1 at PageID #: 27336-37, ¶ B.1.4; PageID #: 37357, ¶ B.2.6.](#)

² The five VCM tank cars involved in the derailment are identified as Cars 26, 27, 28, 29, and 53. *See* [ECF No. 617-1 at PageID #: 27318, ¶ A.2.1](#) as modified by [ECF No. 740](#).

³ *See* [ECF No. 586 at PageID #: 17627, ¶ 6; PageID #: 17628, ¶ 15.](#)

⁴ According to Norfolk Southern, a fact that is undisputed by OxyVinyls and GATX’s experts is that aluminum was present in Car 29’s pressure plate assembly. *See* Combined Memorandum in Opposition ([ECF No. 679](#)) at PageID #: 47490.

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II.

The Federal Rules of Evidence, and specifically [Rule 702](#), “assign to the trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” [Daubert v. Merrill Dow Pharm., Inc., 509 U.S. 579, 597 \(1993\)](#). [Rule 702](#) governs the admissibility of expert testimony and codifies the Supreme Court’s holdings in *Daubert* and [Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 \(1999\)](#). Expert testimony is admissible only if (1) the testimony is based on sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the expert has reliably applied the principles and methods to the facts of the case. [Fed. R. Evid. 702](#). The proponent of the expert testimony has the burden of establishing by a preponderance of the evidence that the proposed testimony satisfies those standards. See [Fed. R. Evid. 702 advisory committee’s note \(2000\)](#); [Daubert, 509 U.S. at 592 n.10](#). Expert testimony is not admissible “is the exception rather than the rule.” [In re Scrap Metal Antitrust Litig., 527 F.3d 517, 530 \(6th Cir. 2008\)](#) (quoting [Fed. R. Evid. 702 advisory committee’s note \(2000\)](#)).

Furthermore, *Daubert* analysis includes consideration of [Fed. R. Evid. 403](#). [Daubert, 509 U.S. at 595](#). Therefore, courts in the Sixth Circuit employ a four prong test to determine the admissibility of expert opinions: “(1) that the witness, a qualified expert, (2) was testifying to a proper subject, (3) which conformed to a generally accepted explanatory theory, and (4) the probative value of the testimony outweighed its prejudicial effect.” [United States v. Smithers, 212 F.3d 306, 312 \(6th Cir. 2000\)](#) (citing [United States v. Green, 548 F.2d 1261 \(6th Cir.1977\)](#)).

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III.

In June 2023, S-E-A, Ltd. (S-E-A) was retained on behalf of Norfolk Southern. This matter was assigned to McClellan, whom holds a Bachelor of Science degree in Mechanical Engineering from the University of Nebraska-Lincoln. He is a licensed Professional Engineer. See [ECF No. 617-1 at PageID #: 27307, ¶¶ 1.0.1- 1.0.2](#). There is no dispute that McClellan is an expert in heating, ventilation, and air conditioning (“HVAC”) systems. Moreover, OxyVinyls and GATX do not dispute McClellan’s extensive expertise in pressure vessels⁵ and, at least in the case of GATX, their PRDs, his nine years of experience investigating mechanical equipment and related systems, including failures of pressure vessels and their PRDs, or his 14 years of experience designing and specifying mechanical equipment, including pressure vessels and PRDs. See, e.g., McClellan Curriculum Vitae ([ECF No. 617-1 at PageID #: 27435-40](#)).

McClellan is proffered by Norfolk Southern as an expert in pressure vessels and PRDs who opines, as relevant to the within motions, that PRDs malfunctioned on the railcars containing OxyVinyls’ VCM. McClellan opines that the pool fires heated the tank cars and caused certain PRDs to relieve pressure by discharging VCM, but that these PRDs probably discharged material below their rated flow rate due to fouling by solidified molten aluminum.

McClellan offers four challenged opinions:

- Opinion 1 - The PRDs of Cars 28, 29, and 53 probably malfunctioned by discharging material at a fraction of their rated flow rate.

⁵ McClellan testified at his deposition that any expertise he has in pressure vessels “all relate[s] back to [his] HVAC experience.” [ECF No. 620-1 at PageID #: 31213](#).

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- Opinion 2 - Solidified molten aluminum found in the pressure plate assemblies of Cars 28, 29, and 53 probably interfered with the operation of their PRDs, causing the PRDs to discharge material at a fraction of their rated flows.
- Opinion 3 - If the internal pressure in Car 27 reached the set point for the PRD activation, then it is probable that interference from solidified molten aluminum observed in the pressure plate assembly prevented the PRD from activating.

[ECF No. 617-1 at PageID #: 27308](#). McClellan reaches Opinions 2 and 3 by concluding:

- Aluminum likely contacted the top guide and bushings of the PRDs on Cars 27, 28, 29, and 53 prior to the vent and burn operation. It is likely that solidified aluminum, especially if in contact with the top guide bushing, would affect the operation of the PRD, either limiting its travel distance and thereby reducing its flow to something below its rated flow capacity, or preventing the PRD from lifting at all, as seen in the testing of the PRDs of Cars 28 and 53.

[ECF No. 617-1 at PageID #: 27432, ¶ E.6.1](#).

- It is probable that solidified molten aluminum in the top guide or solidified molten aluminum in the valve stem/top-guide-insert bushing prevented the full actuation of the PRDs.

[ECF No. 617-1 at PageID #: 27433, ¶ E.6.3](#).

- Opinion 4 - Hydrochloric acid (“HCl”) probably corroded the PRD of Car 29. [ECF No. 617-1 at PageID #: 27393, ¶ C.4.3](#); Deposition of R. Peter McClellan ([ECF No. 620-1](#)) at PageID #: 31296 (“... HCL that was released as a result of the lazy flame of the burning VCM that’s observed in several of the pictures that are available through the NTSB docket, that that chemical

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reaction of the burning VCM released HCL, and ate away at that PRD”); [ECF No. 620-1 at PageID #: 31270](#) (“[T]here was obvious physical damage to [Car 29] from what appeared to be HCL interaction.”); [ECF No. 617-1 at PageID #: 27393, ¶ C.4.3](#) (“[H]ydrogen chloride (HCl) that was formed when VCM exiting the PRD of [Car 29 or Car 28] ignited and burned.”).

- Opinion 5 - Punctures and resulting damage from the vent and burn charges on Car 29 suggest that, prior to detonation, there was damage to the shell walls of Car 29 that had weakened the shell. [ECF No. 617-1 at PageID #: 27357, ¶ B.2.6](#); [ECF No. 620-1 at PageID #: 31245](#).

IV.

OxyVinyls moves the Court to exclude two of McClellan’s opinions (and their sub-opinions) set forth in his Opening Report ([ECF No. 617-1](#)) and Rebuttal Report ([ECF No. 617-2](#)). OxyVinyls and GATX argue that certain of McClellan’s PRD and railcar-damage opinions should be excluded because he lacks experience with PRDs for railcar tanks. Norfolk Southern responds that McClellan explained his experience is applicable to railcar tanks and their PRDs because PRDs, whether installed on a stationary tank or a railcar tank, operate the same way. He testified during cross-examination at his deposition that his experience with pressure vessels was applicable to VCM railcars:

Q. Do you have any prior experience in the analysis of railroad tank cars?

A. Well, again, it’s – I would say it would be misleading to ask, do you have experience with railroad tank cars because, quite frankly, all a railroad tank car is is a pressure vessel that’s on rails. So it would be very similar to one that is stationary as far as how it’s supposed to operate.

So, no, I haven’t analyzed a railroad tank car, however, I’ve certainly analyzed other tanks.

Q. Sorry. But for the specific question of railroad tank cars, the answer is no; right?

A. So for railroad tank cars, again, similar operation to all kinds of other things, but no.

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[ECF No. 620-1 at PageID #: 31217](#); *see also* [PageID #: 31224-25](#) (McClellan admits during cross-examination the tank pressure vessels on which he has experience have all been stationary, but are “extremely similar to the one that’s moving”). The Court finds McClellan’s decades of experience specifying, designing, and investigating pressure vessels and PRDs is relevant and applicable to railcar tanks and sufficient to qualify him to opine on pressure vessels and PRDs in the case at bar. McClellan’s decades of experience analyzing PRDs and incidents involving them is directly transferrable to the performance of the PRDs in this case.

In [First Tenn. Bank Nat’l Ass’n v. Barreto](#), 268 F.3d 319 (6th Cir. 2001), the Sixth Circuit held that a lending expert’s unfamiliarity with “some aspects” of lender-borrower relationships “merely affected the weight and credibility of his testimony, not its admissibility.” [Id. at 333](#). The Court finds that any weaknesses in McClellan’s qualifications would thus go to the weight rather than the admissibility of his opinion testimony. Moreover, [Rule 702](#) does not require an expert to have expertise or experience so narrow as to have captured a perfectly analogous case, and McClellan’s decades of engineering experience satisfy the requirements to admit his testimony under [Rule 702](#). *See United States v. Langan*, 263 F.3d 613, 623 (6th Cir. 2001) (“To demand that there be a specific qualification . . . is unjustified unless there exists some principled distinction between the methods, theory, and results used[.]”). The Court also notes McClellan has two-plus decades of experience specifying, designing or investigating mechanical equipment, including pressure vessels and their PRDs.

Norfolk Southern notes that OxyVinyls and GATX do not challenge in the within motions many of McClellan’s other opinions set forth in ECF Nos. [617-1](#) and [617-2](#), including

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that

(1) most of the temperatures reported for [Cars 26, 27, 28, and 29] were more likely than not the temperatures of the railcar tank external jackets; (2) hydrogen chloride or hydrochloric acid (HCl) formed due to combustion of VCM; (3) degradation of the VCM railcars' insulation would have probably exposed the shells to elevated temperatures and increased the risk of a BLEVE event; and (4) emergency responders would have had to place themselves adjacent to the railcars for a significant amount of time in a dangerous environment in order to determine which railcars were safe to hot tap.

[ECF No. 679 at PageID #: 47488; 47491 n. 1](#) (a BLEVE event is a

boiling-liquid-expanding-vapor explosion. [ECF No. 617-1 at PageID #: 27326, ¶ A.4.1](#)).

Accordingly, Norfolk Southern does not address them in [ECF No. 679](#).⁶

A.

OxyVinyls argues that while McClellan is a HVAC expert, he is not an expert in the operation of tank car PRDs. According to OxyVinyls and GATX, McClellan is not qualified to offer any opinions on the operation of railroad tank car PRDs, much less PRDs on tank cars carrying VCM. Because McClellan lacks the requisite background and experience to offer these expert opinions on the operation of railroad tank car PRDs, OxyVinyls contends Opinions 2 and 3 (and their sub-opinions) should be excluded.

The Court finds that McClellan is qualified to opine on the malfunctioning of the VCM Railcars' PRDs and damage to the VCM Railcars. Contrary to OxyVinyls assertions, *see* [ECF No. 617 at PageID #: 27287](#), McClellan has previously testified in deposition about his opinion involving a PRD in one "compressed air matter." *See* [ECF No. 617-1 at PageID #: 27441](#)

⁶ OxyVinyls and GATX, however, retain the right to attack the weight of these other opinions through proper means, including cross-examination and the presentation of contrary evidence. *See* OxyVinyls' Reply ([ECF No. 692](#)) at PageID #: 51109 n.2.

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(*Cushman v. Axxiom Manufacturing, Inc.*, No. 22-C-04328-S1 (Gwinnett Cnty. Ct. State of Ga. Feb. 7, 2024)); [ECF No. 620-1 at PageID #: 31221](#). See [Berry v. City of Detroit](#), 25 F.3d 1342, 1351 (6th Cir. 1994) (Courts in the Sixth Circuit do not consider “the qualifications of a witness in the abstract, but whether those qualifications provide a foundation for a witness to answer a specific question.”). In addition, McClellan’s challenged opinions satisfy the low threshold for relevance, which GATX does not dispute. [United States v. Lang](#), 717 Fed.Appx. 523, 530 (6th Cir. 2017) (citing [Dortch v. Fowler](#), 588 F.3d 396, 401 (6th Cir. 2009)).

B.

McClellan’s opinions regarding PRDs are reliable. They are not mere “unsupported speculation,” but instead rest on a detailed analysis of the record evidence informed by McClellan’s lengthy experience specifying, designing, and investigating pressure vessels and PRDs. See [In re Scrap Metal](#), 527 F.3d at 529-30.

1.

OxyVinyls contends that McClellan fails to state his opinions that melted aluminum affected the operation of the PRDs in Cars 26,⁷ 28, 29, and 53 with the requisite level of certainty as required by [Rule 702](#). According to OxyVinyls, Opinions 2 and 3 are mere speculation and should be excluded.

Norfolk Southern argues to the contrary. Opinion 2 states that solidified molten aluminum found in the pressure plate assemblies of Cars 28, 29, and 53 “probably interfered” with the operation of their PRDs, resulting in reduced flow through the PRDs. In Opinion 3,

⁷ Contrary to OxyVinyls’s assertions, see [ECF No. 617 at PageID #: 27288](#), McClellan does not offer any opinion on the operation of the PRD of Car 26.

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McClellan states: “If the internal pressure in Car 27 reached the set point for the PRD activation, then it is “probable” that interference from solidified molten aluminum observed in the pressure plate assembly prevented the PRD from activating. [ECF No. 617-1 at PageID #: 27308](#). An expert “must state his opinion in terms of probability,” meaning more than 50 percent likelihood. [Davison v. Cole Sewell Corp., 231 Fed.Appx. 444, 449 \(6th Cir. 2007\)](#). That is what McClellan has done here.

Despite McClellan’s Opinion 2 that solidified molten aluminum “probably interfered” with the operation of the PRD of Car 29, OxyVinyls and GATX both argue that somehow he considers it is only a possibility, not a probability. See [ECF No. 617 at PageID #: 27290](#); [ECF No. 620 at PageID #: 31193-94](#). With that goal in mind, OxyVinyls and GATX both exploit a different opinion in which McClellan states that “[i]t is *possible* that solidified molten aluminum that hardened on the PRD’s top guide or inside the guide tube interfered with the PRD’s ability to operate.” [ECF No. 617-1 at PageID #: 27417, ¶D.4.2](#) (emphasis added); [ECF No. 620-1 at PageID #: 31265](#). According to Norfolk Southern, “these two opinions are not inconsistent because they are plainly different in scope, with the former referring to the entire pressure plate assembly and the latter referring to subcomponents of the PRD.” See [ECF No. 679 at PageID #: 47495](#). To the extent there are conflicts or inconsistencies in McClellan’s expert’s report, “those may be the subject of cross-examination for the jury’s consideration and are not a basis for exclusion.” [Olszeski v. Ethicon Women’s Health & Urology, No. 5:19CV1787, 2022 WL 1063737, at *10 \(N.D. Ohio April 8, 2022\)](#) (Pearson, J.) (discussing conflicts or inconsistencies in an expert’s deposition testimony).

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2.

Next, Norfolk Southern points to evidence in the record that supports McClellan's Opinion 2 that aluminum "probably interfered" with Car 29's PRD in order to refute GATX's assertion that McClellan lacks evidentiary support for his opinion. McClellan relied on photographs before and after the vent and burn that indicate (i) solidified molten aluminum was present in the pressure plate assembly of Car 29 and (ii) aluminum had melted before the vent and burn, such as photos showing that the aluminum housing cover of Car 29 was missing before the vent and burn. *See, e.g.*, [ECF No. 617-1 at PageID #: 27389-96, ¶¶ C.4.1-3; PageID #: 27415-17, ¶ D.4.1; PageID #: 27418-20, ¶ D.4.3](#). McClellan also relied on fact witness testimony and on the NTSB Hazmat Report which (i) support the point that melted aluminum was affecting the operations of the valves and fittings of the railcars' PRDs and that there were concerns about how well those PRDs were functioning as a result, and (ii) describe the unusual operation of Car 29's PRD after the derailment including that the PRD "cycled on for approximately 30 seconds every two minutes for a six-hour period starting around midnight February 4, 2023, before abruptly stopping in the morning of February 4, 2023." [ECF No. 617-1 at PageID #: 27400, ¶ C.6.3; see also ECF No. 617-1 at PageID #: 27417, ¶ D.4.2](#).

3.

OxyVinyls's contends McClellan lacks the requisite certainty that hydrochloric acid ("HCl") interfered with the functioning of the PRDs. Norfolk Southern responds that McClellan's Opinion 4 – that hydrochloric acid probably corroded the PRD of Car 29 - is stated with sufficient certainty and is well supported. The Court agrees that McClellan's Opinion 4 satisfies the required level of certainty for admission as expert testimony. *See Davison, 231*

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[Fed.Appx. at 449](#) (an expert “must state his opinion in terms of probability,” meaning more than 50 percent likelihood).

GATX asserts that there is no scientific basis for McClellan’s Opinion 4. *See* [ECF No. 620 at PageID #: 31195](#). But it is undisputed that significant quantities of HCl were generated by the combustion of VCM, that the steel PRD top guide of Car 29 was missing and its remnants appeared corroded, that other components of the pressure plate assembly of Car 29, including two liquid angle valves, had damage in the form of holes that is consistent with HCl corrosion, that aluminum was present in the pressure plate assembly of Car 29, and that HCl will react with aluminum. *See* [ECF No. 617-1 at PageID #: 27393, ¶ C.4.3; PageID #: 27415-16, ¶ D.4.1; PageID #: 27417, ¶ D.4.2; PageID #: 27418, ¶ D.4.3; ECF No. 620-1 at PageID #: 31297](#) (“hydrogen chloride [basically the gaseous form of hydrochloric acid] introduced by the burning of vinyl chloride monomer would eat away at steel . . . and it is a byproduct of burning VCM”). Norfolk Southern points out that none of the experts retained by GATX, including Joseph Lemberg, a proffered GATX expert on materials science engineering, provides an explanation for the corrosion experienced by Car 29’s pressure plate assembly components or dispute McClellan’s opinion regarding HCl. *See, e.g.,* Lemberg Opposition Expert Report ([ECF No. 627-5](#)). In fact, Dr. Georges Melhem, an expert retained by OxyVinyls, admits that “[m]olten aluminum can react with VCM to make aluminum chlorides.” Melhem Expert Report ([ECF No. 628-3](#)) at PageID #: 37473.

McClellan opines that the conditions of Car 29’s PRD top guide and valve body, liquid angle valve, and sample port were consistent with corrosive damage from HCl. *See* [ECF No. 617-1 at PageID #: 27393, ¶ C.4.3; ECF No. 620-1 at PageID #: 31296-97](#). For example, he

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states that a white powder observed in the remnants of the PRD top guide was likely aluminum oxide and/or aluminum chloride, byproducts from HCl interacting with aluminum:

Q. Is there evidence of aluminum on the valve stem?

A. Of what?

Q. The PRD in [Car 29]?

A. I would have to take a look at the photographs. Any aluminum that would have been there would have also had a reaction with any HCL that was present, so it would appear as a white powder, most likely.

Q. So if there was aluminum on the valve seat of [Car 29]'s PRD, it would appear as a white powder because it would have interacted with HCL; is that right?

A. Correct, or white crystal or white powder. One of them, yes.

[ECF No. 620-1 at PageID #: 31299](#); *see also* [ECF No. 617-1 at PageID #: 27394](#), ¶ C.4.3 (Figure 69). According to Norfolk Southern, “[t]here is little doubt that [Car 29]’s pressure plate assembly contained molten aluminum before the vent and burn and that aluminum was therefore present to interact with HCl generated from VCM combustion.” [ECF No. 679 at PageID #: 47497-98](#).

An “[i]nspection of the pressure plate assembly and the PRD [of Car 29] by S-E-A did not reveal any evidence of solidified molten steel,” [ECF No. 617-1 at PageID #: 27400](#), ¶ C.6.3, which indicates that it is highly unlikely that the PRD top guide melted, *see* [ECF No. 620-1 at PageID #: 31296](#). McClellan also concluded it was unlikely that the top guide was damaged in the initial derailment in a mechanical failure due to the lack of significant bending or fractures in the surrounding steel structures, such as the top-fitting housing. *See* [ECF No. 617-1 at PageID #: 27400](#), ¶ C.6.4. Therefore, these potential alternative explanations for the damage to the PRD top guide were ruled out by McClellan.

Finally, that McClellan considered alternate models for malfunctioning of the PRD (aluminum fouling or HCl corrosion) does not undermine his opinion and testimony. It is also

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not the trial judge's job to determine whether an expert's opinion is correct; instead, the judge is limited to determining whether expert testimony is pertinent to an issue in the case. As stated in [*Stuhlmacher v. Home Depot U.S.A., Inc.*, 774 F.3d 405 \(7th Cir. 2014\)](#):

. . . Experts are allowed to posit alternate models to explain their conclusions. [*Walker*, 208 F.3d at 587](#). “Where an expert’s hypothetical explanation of the possible or probable causes of an event would aid the jury in its deliberations, that testimony satisfies *Daubert*’s relevancy requirement.” [*Smith*, 215 F.3d at 718-19](#). The question of whether the expert’s theory is correct given the circumstances of a particular case is a factual one left for the jury to determine. [*Id.* at 719](#).

[*Id.* at 409](#). For each model, McClellan’s analysis is “based upon facts in the record, and [are] not assumptions or guesses.” [*Shepard & Assocs., Inc. v. Lokring Tech., LLC*, No. 1:20-cv-02488, 2023 WL 5336986, at *12 \(N.D. Ohio Aug. 18, 2023\)](#). At best, then, GATX’s challenge to the evidentiary support underlying McClellan’s opinions “merely [goes] to the accuracy of the conclusions, not to the reliability of the testimony.” [*Id.*](#) (quoting [*In re Scrap Metal*, 527 F.3d at 530](#)). “It is the responsibility of the jury to evaluate the expert’s conclusions and to weigh the expert’s evidence against the evidence presented by the parties.” [*Dilts v. United Grp. Servs., LLC*, 500 Fed.Appx. 440, 446 \(6th Cir. 2012\)](#).

4.

McClellan’s Opinion 1 is that the PRDs of Cars 28, 29, and 53 probably malfunctioned by discharging material at a fraction of their rated flow rate. See [ECF No. 617-1 at PageID #: 27308](#). GATX argues that McClellan relies upon unsupported assumptions and speculation to reach this opinion with regard to Cars 29 and 53. See [ECF No. 620 at PageID #: 31196-98](#). The Court finds that the record in the case at bar provides a sufficient basis for McClellan’s opinion using conservative assumptions. See [*Asad v. Cont’l Airlines, Inc.*, 314 F. Supp.2d 726, 740 \(N.D. Ohio 2004\)](#) (an expert “is not precluded from testifying as to causation simply because he

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lacks precise details” of the circumstances of plaintiff’s harm) (citing [*Hardyman v. Norfolk & Western Railway Co.*, 243 F.3d 255, 265-66 \(6th Cir. 2001\)](#)).

McClellan constructed a timeline for PRD discharge based on the factual record and applied engineering calculations to show the deficient levels of discharge. See [ECF No. 617-1 at PageID #: 27399-400, ¶¶ C.6.2 - C.6.3; PageID #: 27401, ¶ C.6.5; PageID #: 27423-33, ¶¶ E.0.1 - E.6.4; PageID: 27427, App. SEA-01](#). He also reviewed fact witness testimony and the NTSB Hazmat Report to estimate a timeline that the PRDs of Cars 28, 29, and 53 were cycling, concluding that their PRDs cycled “every two minutes operating for about 30 seconds and then resetting” before stopping the morning of February 4, 2023. See [ECF No. 617-1 at PageID #: 27424-25, ¶¶ E.1.3 - E.1.4](#). In addition, McClellan performed engineering calculations to determine the rated discharge or flow rates for the PRDs installed in Cars 28, 29, and 53 based on a technical data sheet for the PRDs installed in Cars 28, 29, and 53. See, e.g., [ECF No. 617-1 at PageID #: 27326, ¶ A.4.1; PageID #: 27426, ¶ E.4.1; PageID #: 27429, ¶ E.4.2; PageID #: 27427, App. SEA-01; PageID #: 27451-79, App. SEA-02](#). Next, he then estimated actual discharge flow rates based on conservative assumptions that “[gave] the benefit of the doubt to the valve[s].” [ECF No. 620-1 at PageID #: 31291](#). For example, despite evidence suggesting that the PRDs of Cars 29 and 53 may have cycled as long as 16 hours, McClellan conservatively assumed that the PRDs of Cars 29 and 53 cycled for only six hours. [ECF No. 617-1 at PageID #: 27423-33, ¶¶ E.0.1 - E.6.4; PageID #: 27427, App. SEA-01; ECF No. 620-1 at PageID #: 31291](#). He also conservatively assumed that the contents of Car 28 were empty at the time its PRD stopped cycling. See [ECF No. 617-1 at PageID #: 27431, ¶ E.5.2; ECF No. 620-1 at PageID #: 31291](#). And despite these conservative assumptions, the discharge flow from the PRDs of Cars 28, 29,

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and 53 turned out to be a fraction of their calculated rated flow rate for VCM, indicating that the PRDs of Cars 29 and 53 were malfunctioning. See [ECF No. 617-1 at PageID #: 27430-31, ¶ E.4.4; PageID #: 27431-32, ¶¶ E.5.2 - E.5.3; PageID #: 27432-33, ¶¶ E.6.1 - E.6.4.](#)

5.

Finally, OxyVinyls argues that McClellan cannot offer an expert opinion regarding the extent of damage to the railroad tank cars. Specifically, OxyVinyls and GATX seize on statements in McClellan's opening report and deposition, including a statement in his opening report that "there may have been damage to the shell walls that had weakened the shell" of Car 29, to argue that his opinion regarding shell damage is speculation. See [ECF No. 617 at PageID #: 67291; ECF No. 620 at PageID #: 31198-99](#). McClellan confirmed, however, "that there is data that supports that there was damage there" and that "it's likely that there was damage in that area prior to the vent and burn operation." [ECF No. 620-1 at PageID #: 31245](#). McClellan's opinion has the required level of certainty for admissibility as expert testimony. [Davison, 231 Fed.Appx. at 449](#). Furthermore, to the extent there are any purported conflicts or inconsistencies between deposition testimony and expert reports, that is not a basis to exclude, but rather an issue for the jury. See [Olszeski, 2022 WL 1063737, at *10](#).

GATX also contends that McClellan's opinions on shell damage to Car 29 are unreliable because he allegedly fails to identify supporting record evidence. [ECF No. 620 at PageID #: 31198-99](#). McClellan, however, explains that

... [Car 29] exhibited a star-shaped 16" x 43" hole at the A-end left shell (**Figure 37**) and a 11" x 29-3/4" hole at the B-end bottom shell. Cracks totaling 26" long in the tank shell were found adjacent to the lower vent and burn blowhole, running parallel to the inboard bolster pad. The punctures and resultant damage from the vent and burn charges on [Car 29] are more significant than that of the other (four) cars that were subject to similar detonations. This discrepancy

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suggests that, prior to the detonation of any charges, there may have been damage to the shell walls that had weakened the shell. **Figure 38, Figure 39, Figure 40, and Figure 41** are the pages of the NTSB Damage Form for Railcar 31.

[ECF No. 617-1 at PageID #: 27357, ¶ B.2.6](#) (emphasis in original). According to McClellan, other evidence, such as the high temperature reading at hour 58 of Car 29, indicates the outside jacket of Car 29 was pierced. See [ECF No. 617-1 at PageID #: 27329-30, ¶¶ A.5.4 -A.5.6](#); [ECF No. 620-1 at PageID #: 31234-38](#).

V.

For the foregoing reasons and those that have been articulated in the memorandum of the points and authorities on which Norfolk Southern relies, OxyVinyls' Motion to Exclude Certain Opinions of R. Peter McClellan ([ECF No. 617](#)) and GATX's Motion to Exclude in Part the Expert Testimony of Peter McClellan and Joinder to OxyVinyls' Motion to Exclude Certain Opinions of R. Peter McClellan ([ECF No. 620](#)) are denied.

IT IS SO ORDERED.

February 4, 2025
Date

/s/ Benita Y. Pearson
Benita Y. Pearson
United States District Judge